REMARKS

Claims 1-20, 35, and 40 are pending in the case. Further examination and reconsideration of pending claims 1-20, 35, and 40 are hereby respectfully requested.

Section 103 Rejection:

Claims 1-12, 19-20, 35, and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,452,172 to Oi (hereinafter "Oi '172") in view of U.S. Patent No. 6,486,471 to Oi (hereinafter "Oi '471"). In addition, claims 13-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Oi '172, Oi '471, U.S. Patent No. 5,057,689 to Nomura et al. (hereinafter "Nomura"), U.S. Patent No. 6,188,071 to Gordon et al. (hereinafter "Gordon"), and U.S. Patent No. 5,194,808 to Shintaku et al. (hereinafter "Shintaku"). As will be set forth in more detail below, this rejection is respectfully traversed.

To establish a case of *prima facie* obviousness of a claimed invention, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Second, there must be a reasonable expectation of success. As stated in MPEP 2143.01, the fact that references can be hypothetically combined or modified is not sufficient to establish a *prima facie* case of obviousness. *See In re Mills*, 916 F.2d. 680 (Fed. Cir. 1990). Finally, the prior art references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d. 981 (CCPA 1974); MPEP 2143.03. Specifically, "all words in a claim must be considered when judging the patentability of that claim against the prior art." *In re Wilson* 424 F.2d., 1382 (CCPA 1970). Using these standards, Applicants contend that the cited art fails to teach or suggest all features of the currently pending claims, some distinctive features of which are set forth in more detail below.

The combination of Oi '172 and Oi '471 does not teach or suggest both an output signal and an input signal received by a control circuit (claims 1 and 35); nor does the combination of Oi '172 and Oi' 471 teach or suggest generating a control signal in response to both an output signal and an input signal (claims 20 and 40). Present independent claims 1 and 35 make clear that the control signal receives both an output signal and input signal. The output signal is derived from a magnetic sensor and the input signal is responsive to a predetermined magnetic field strength. Responsive to receiving the output signal and the input signal, the control circuit then generates a control signal. Claims 20 and 40

have many of the same limitations as claims 1 and 35 in that a control signal is generated in response to both an output signal and input signal. Again, the output signal and input signal are two different signals from each other, wherein the output signal is generated in response to a magnetic field strength generated by the magnetic lens, and the input signal is generated in response to predetermined magnetic field strength.

Contrary to the present independent claims, Oi '172 is purposely restricted to a control system 4 that produces an output to control an electron beam lens barrel 2 (Oi '172 -- Fig. 2; col. 2, lines 37-40). However, as far as the input to control system 4, there is arguably no inputs to control system 4 shown in Oi '172. This is due primarily to box 10 being unidentified in Oi '172. It is likely that box 10 is a control system similar to control system 4 and, thus, provides only an output to item 9 if, indeed, the Examiner's assertion is correct that meaning for item 10 can be gleaned from Oi '471. Specifically, Oi '471 describes box 10 as being a controller with only an output sent to the neutralizing coil of item 9 and, thus, item 9 is "controlled by controller 10" (Oi '471 -- col. 2, lines 39-40; Fig. 1). Thus, when reading Oi '172 and Oi' 471 in combination, there are no inputs whatsoever to a control system (or control circuit) which controls a lens, such as electron beam lens barrel 2 in both Oi '172 and Oi '471.

Absent any inputs whatsoever, it would appear that the combination of Oi '172 and Oi '471, if properly combined, would show a control system 4 and/or 10 that is absent input of either an output signal or an input signal as presently claimed. However, if hypothetically the Examiner would argue that box 10 somehow produces an output to control system 4 or that magnetic field detector 9 produces an output to a combination of control system 4/10, Applicants note that only one input is placed into control system 4, 10, or 4/10 of Oi '172/'471. Thus, while Oi '172/'471 might be suggestive of a control circuit configured to receive an output signal from a magnetic sensor, certainly Oi '172/'471 makes no suggestion of any other inputs to the control circuit, much less an input signal responsive to a predetermined magnetic field strength. Again, the present independent claims recite a control circuit that receives both an output signal and input signal (i.e., two different signals). Oi '172 makes clear that "the above value" is the same value output from detector 9, and not another value representative of an input signal responsive to a predetermined magnetic field strength (*see*, for example, Oi '172 -- col. 2, lines 33-34).

In addition to patentable distinctions of the independent claims, the combination of various cited art also does not teach or suggest features set forth in numerous dependent claims. For example, the combination of Oi '172/'471 do not teach or suggest an input signal that comprises a voltage

having a linear relationship since, in fact, the cited references do not teach an input signal (*see*, for example, present claim 4). In addition, Oi '172/'471 do not teach or suggest a control signal that is responsive to a function of the output signal and the input signal (*see*, for example, present claim 6). Still further, Oi '172/'471 do not teach or suggest an applied current to a coil of the magnetic lens or an applied current which generates a second magnetic field closer to the predetermined magnetic field strength than the first magnetic field (*see*, for example, present claims 7 and 8).

For at least the reasons stated above, independent claims 1, 20, 35, and 40, as well as claims dependent therefrom, are patentably distinct over the cited art. Accordingly, removal of this rejection is respectfully requested.

CONCLUSION

This response constitutes a complete response to all issues raised in the Office Action mailed April 26, 2004. In addition, the art cited but not relied upon is not believed to be pertinent to the patentability of the present claims. In view of the remarks traversing the rejections, Applicants assert that pending claims 1-20, 35, and 40 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned earnestly requests a telephone conference.

The Commissioner is authorized to charge any required fees or credit any overpayment to Conley Rose, P.C. Deposit Account No. 03-2769/5589-00301.

Respectfully submitted,

Ann Marie Mewherter
Reg. No. 50,484
Agent for Applicant(s)

Conley Rose, P.C.
P.O. Box 684908
Austin, TX 78768-4908
Ph: (512) 476-1400
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KLD